

Docket No YOR920010337US1

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

## Patent Application

Applicant(s) Mangu et al.  
Docket No.: YOR920010337US1  
Serial No.: 09/847,139  
Filing Date: May 2, 2001  
Group: 2641  
Examiner: Tim P. Lao

Title: Error Corrective Mechanisms for Consensus Decoding of Speech

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AFFIDAVIT UNDER 37 C.F.R. §1.131

We, the undersigned, hereby declare and state as follows:

1 We are the named inventors of the invention described and claimed in the above-referenced U.S. Patent application

2. We reduced to practice the invention on or before November 3, 2000, as evidenced by Exhibits A through C.

3 Exhibit A is a portion of an email showing directory contents. The directory contents contain time stamps for the programs "Learn\_rules.pl" and "Apply\_rules.pl~". As evidenced by the directory contents, the program "Learn\_rules.pl" has a time stamp of October 4, 2000, the program "Apply\_rules.pl~" has a time stamp of November 3, 2000. The program "Learn\_rules.pl" is shown in Exhibit B, and the program "Apply\_rules.pl~" is shown in Exhibit C.

4. Exhibit B shows the program "Learn\_rules.pl". The program "Learn\_rules.pl" outputs a set of rules based on a training set of confusion sets. The confusion sets have a number of candidate words determined from acoustic events, where each of said candidate words has an associated score (e.g., a posterior probability is used as a score). The rules can be used to select one of the candidate words in the confusion set, and the selected word may or may not be the word having the highest score. The program is used to determine which rules will choose the correct candidate word for the candidate sets, to determine which rule performs the best, to apply the best rule to the training set, and to continue this process until a set of beneficial rules are determined.

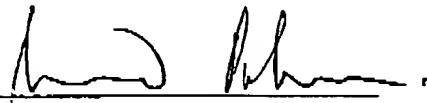
Docket No. YOR920010337US1

5. Exhibit C shows the program "Apply\_rules.pl~", which applies the rules to confusion sets determined from real-time acoustic events and having a number of candidate words, each candidate word having an associated score. The output is a set of selected candidate words for the acoustic events.

6. All statements made herein of my own knowledge are true, and all statements made on information and belief are believed to be true.

7. We understand that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U S C. §1001, and may jeopardize the validity of the application or any patent issuing thereon.

Date: \_\_\_\_\_

Date: 8/3/04\_\_\_\_\_  
Lidia L. Mangu  
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Mukund Padmanabhan